

Attorney Docket No. 94-552

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Title: MANUFACTURING RAISED ELECTRICAL CONTACTS HAVING CONTROLLED GEOMETRY

Serial No.: 08/152,812

Filing Date: 11/16/93

Inventor: KHANDROS

Examiner: Knapp, J.

Art Unit: 3205

To: Commissioner of Patents and Trademarks  
Washington, D.C. 20231

AFFIDAVIT

COMES NOW THE AFFIANT AND, FIRST BEING DULY SWORN, AVERS AS FOLLOWS:

1. I, BENJAMIN N. ELDRIDGE, am a US citizen residing at 11 High Ridge Rd., Hopewell Junction, NY 12533.

2. I was granted a Bachelor of Science degree in Electrical Engineering from Union College (Schenectady, NY) in the year 1982.

3. I was granted a Master of Science degree in Physics from Rensselaer Polytechnic Institute (Troy, NY) in the year 1984.

4. Between the years 1985 and 1994, I was employed by IBM (Research Division, Yorktown Heights, NY), where my general duties included surface analytical research and, from 1987 onward, my work was specifically directed to analysis of organic thin films on surfaces (predominantly metal surfaces).

long chain molecular ions with increasing Cu-BTA film thickness.

(c) the aforementioned U.S. Patent No. 4,821,148 describes forming metal-BTA compounds with copper, aluminum and silver. No mention is made of forming a gold-BTA compound which, to my knowledge, would not be feasible.

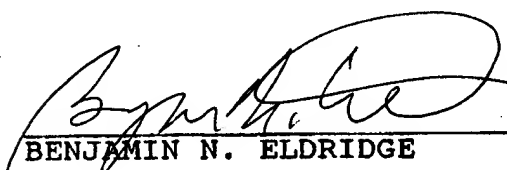
(d) the aforementioned U.S. Patent No. 4,821,148 is directed to forming metal-BTA compounds over bond wires and bonds, for the express purpose of imparting damp-proofness to the bond wires and bonds;

(e) metal-BTA compounds such as are described in the aforementioned U.S. Patent No. 4,821,148 contain no metallic species in the unoxidized state, and would exhibit extremely low conductivity, commensurate with what would be considered to be an insulator (or insulating coating), although metal-BTA compounds may not be the best choice for an electrically insulating coating; and

(f) metal-BTA compounds such as are described in the aforementioned U.S. Patent No. 4,821,148 would not be suitable for permitting electrical connections to be made to the bond wire or to any terminal (or the like) upon which a metal-BTA compound has been formed, since they are poor conductors. Making electrical connections would require a metallic coating (such as by plating), wherein the metal is in its free, conductive state.

10. In direct contrast to the teachings of the aforementioned U.S. Patent No. 4,821,148, metallic platings (or other techniques of applying a coating to a wire), such as nickel, are ideal for permitting electrical connections to be made to a bond wire or to any terminal (or the like) upon which such a metallic plating has been applied.

11. The teachings of the aforementioned U.S. Patent No. 4,821,148 are inapposite and antithetical to applying a conductive, metallic coating to a bond wire.

  
BENJAMIN N. ELDRIDGE

2/13/95  
DATE


The affiant, BENJAMIN N. ELDRIDGE, personally appeared before me, the undersigned notary and, first being duly sworn, executed this affidavit.

EXECUTED THIS 13<sup>th</sup> DAY OF Feb, 1995

STATE OF NEW YORK }  
COUNTY OF West }

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS 13<sup>th</sup> DAY OF FEBRUARY, IN THE YEAR 1995, BY BENJAMIN N. ELDRIDGE, WHO IS PERSONALLY KNOWN TO ME, OR WHO HAS DEMONSTRATED BY COMPETENT EVIDENCE (DRIVER LICENSE NO. 590 690 577) TO BE THE PERSON SUBSCRIBING/ACKNOWLEDGING THIS INSTRUMENT.

WITNESS MY HAND AND OFFICIAL SEAL.

  
(Notary's signature)

QUALIFIED IN WESTCHESTER COUNTY  
OCT. 30, 1995

seal (optional)